

9559



SOUTH AUSTRALIA



ANNUAL REPORT

OF

The Central Board of Health

FOR THE

YEAR ENDED 31st DECEMBER, 1947

BY AUTHORITY: K. M. STEVENSON, Government Printer, Adelaide.

1948.

RBB / 63(j)



WELLS	
No.	
Qty	Apr Kep
No.	14128
	J. K. A. S.
	572
	1947



22501400935

THE PUBLIC HEALTH

Annual Report of the Central Board of Health to the Minister of Health (Hon. A. Lyell McEwin, M.L.C.)

Sir—We have the honour to submit our annual report for the year ended 31st December, 1947.

The report is arranged in sections :—

1. Administration.
2. Vital Statistics.
3. State X-ray Health Survey.
4. Local Boards.
5. Sanitation.
6. Food and Drugs.
7. Infectious Diseases.
8. Venereal Diseases.
9. Tuberculosis.
10. The Future of the Public Health.

1. ADMINISTRATION.

Personnel of the Board.—The constitution of the board during the year was :—

Chairman—Albert Ray Southwood, M.D.

Members appointed by the Governor—

Edward Angas Johnson, M.D.

John Burton Cleland, M.D.

Member elected by Metropolitan Local Boards—

Arthur Roy Burnell, J.P.

Member elected by all other Local Boards—

Frank Charles Lloyd, J.P.

Retirement of Mr. S. C. Stenning.—Mr. S. C. Stenning, I.S.O., Secretary of the Central Board of Health, retired from the Public Service on the 10th July, 1947, on attaining the age of retirement. He joined the staff of the board on the 1st February, 1901, and was appointed Secretary on the 1st July, 1909. His long term of devoted duty to the board's affairs earned the admiration of all with whom he associated. His wide and sound knowledge of the principles and procedure of public health administration made him a most valued officer.

New Appointments.—Mr. H. T. Hutchins, formerly chief clerk, has been appointed acting secretary, following Mr. Stenning's retirement. Mr. Hutchins has been an officer on the board's clerical staff since 1909. He has served continuously since that time, apart from leave for overseas duties for 4½ years in World War I. Mr. H. N. Jones, a member of the clerical staff since 1917, is now carrying out the duties of chief clerk.

Return of Sister Wilkinson.—Sister K. M. Wilkinson, nurse-inspector on the staff of the Central Board, has returned from Germany, where she had been working for nearly two years with U.N.R.R.A. She joined the Central Board staff in 1937, and was on leave for the special overseas duty from June, 1945 till August, 1947. She has now returned to Adelaide and has resumed her health work. Reports to hand give great credit to Miss Wilkinson for the good work done in the various hospitals and camps to which she was assigned. The Central Board congratulates Miss Wilkinson on the excellent service, and is pleased to welcome her back to the staff.

Sister A. Nelson, for many years district nurse at Woodville, was relieving nurse-inspector on the Central Board staff during Sister Wilkinson's term abroad. Sister Nelson carried out the duties in a satisfactory manner, and her work was much appreciated.

Work of the Staff.—The Central Board is proud of the continued steady and conscientious work of every member of its staff. The work of the department grows in range and in amount. In these rather difficult days, when the demands on patience and on tact seem ever-increasing, it is pleasing to record such good service. Special efforts were called for in the Diphtheria Prevention Campaign early in 1947, and during the poliomyelitis outbreak later in the year. At all times the staff answered well.

Dr. McQueen Goes Abroad.—The National Health and Medical Research Council, at its session in November, 1947, awarded an Overseas Travelling Fellowship to Dr. George H. McQueen, medical officer on the staff of the Central Board.

Dr. McQueen joined the Central Board staff in July, 1946. He is highly qualified in public health work, and saw service in the recent war. He left for abroad on his fellowship duties in February, 1948. His studies in public health administration and in industrial hygiene, in England and some of the European countries, will occupy most of the current year.

The Central Board tendered congratulations to Dr. McQueen on the high distinction he has gained. His work overseas is expected to be of great value in the future development of this State's health services.

Health Notes.—The board's quarterly bulletin is distributed to chairmen, members and officers of local boards of health throughout the State. It is also sent to medical practitioners, pharmacists, school teachers, social workers and university students. The Central Board appreciates the great assistance given by the large number of contributors to the bulletin. During the year special articles were contributed by the Honourable A. Lyell McEwin, M.L.C.; the Deputy Chief Honorary Medical Officer of the Mothers and Babies' Health Association (Dr. E. Sandford Morgan); Honorary Medical Director, Lobethal Child Health Scheme (Dr. C. C. Jungfer); Medical Superintendent, Adelaide Children's Hospital (Dr. E. B. Sims); Principal Medical Officer, Education Department (Dr. W. Christie); Head of the Department of Entomology at the Waite Agricultural Research Institute (Mr. D. C. Swan, M. Sc.); Secretary, National Fitness Council of South Australia (Mr. T. Ivan Thompson); President, S.A. Branch of the British Medical Association (Dr. L. R. Mallen); Officer of Health, West Torrens (Dr. F. Boyd Turner); Officer of Health, City of Unley (Dr. H. H. E. Russell, O.B.E., V.D.); Officer of Health, Yankalilla (Dr. R. J. deN. Souter); Drs. C. T. Piper and R. J. Sargent; Mr. L. W. Lawlor and several members of the Central Board staff.

The board appreciates the continued co-operation of the Government Printer and his staff in the regular production of this bulletin. The use of coloured covers has added to its attractiveness. For the special Christmas issue on "Food" an effective design in colour was drawn by Mr. S. J. Simmons of the Lands Department. The April issue on *The Doctor and the Public Health* contained a series of articles on the work of officers of health in local board areas.

Advisory Committees.—The Advisory Committee on Health and Medical Services has continued its useful work in co-ordinating the administrative work of various public health and medical services. The matters considered by the committee during 1947 were mass radiography, dental care of school children, home for spastic children, hearing aids, ambulance services, infantile paralysis, and child health.

The Advisory Committee constituted under the Food and Drugs Act reviewed the following matters at its meetings held during 1947:—Poultry dressing, production and sale of cream, compulsory wrapping of bread, colouring of tomato products, preservatives in cordials, dogs in shops, sulphonamides for external use, obtaining poisons by false pretences, labelling of drugs and medicines, penicillin, descriptive matter on labels for spirits, anti-histamine substances, colouring of canned fish, advertising of patent medicines and proprietary articles, bacterial standard for cream.

The Advisory Committee on infantile paralysis held meetings to discuss features of the outbreak which began towards the end of 1947.

Lobethal Child Health Scheme.—This scheme, formed by the Government, is managed by a committee consisting of Drs. A. R. Southwood (Chairman), F. S. Hone, W. Christie, and T. D. Campbell. Dr. C. C. Jungfer is the Honorary Medical Director.

Early in the year Dr. Jungfer stated that the region in which the scheme operates and in which food is plentiful still produced mal-nourished children. Through the co-operation of Dr. F. W. Clements, Director of the Institute of Anatomy at Canberra, the Commonwealth Government made available the services of Miss Phyllis Ashworth, B.Sc., of the institute staff, to conduct a special nutritional survey of the area. Miss Ashworth spent six months in the district, working in association with the officers of the scheme. She took part in several discussions with the managing committee. Her final report is not yet available.

The Health Act Amendment Act, 1947.—This Act enables local boards of health to license rest homes. A rest home is defined as any building other than a building licensed as a private hospital, maternity home, or private mental hospital, in which any person receives any other person (other than a relation to the first-mentioned person) to board or lodge, and who undertakes for fee or reward, to exercise oversight, care, or control over such other person by way of nursing treatment, or treatment applicable to aged, infirm, or helpless or partially helpless persons. Provision is also made to prescribe conditions under which such rest homes may be licensed, and the qualifications of the managers.

The Act also enables a medical officer of a local board, with or without others, to enter any premises at any hour. This provision was inserted with a view of detecting over-crowding, which occurs principally in the night-time, and during which hours there was no legal authority of entry.

The amending Act also requires that dead bodies shall be buried within a certain period and empowers a medical officer to order a burial or cremation even before the expiry of such period.

The Bakehouses Registration Act Amendment Act, 1947.—Under the Bakehouses Registration Act, 1945, the Central Board of Health had no status in the administration. The principal effect of the amendment of 1947 is that local authorities shall administer the Act, subject to the general control of the Central Board.

Food and Drugs Regulations.—Amendments to the Regulations under the Food and Drugs Act, 1908-1943 were promulgated in July. These related to standards or amended standards for whole wheat flour, whole meal flour, or wheat meal, whole wheat bread, whole meal bread or wheat meal bread, brown bread or meal bread, barley bread, rye bread, or other breads, raw, minced or comminuted meat, milk, and milk intended for sale as milk drinks, and iodised salt.

Various amendments were also made concerning protection of food from contamination. These related to personal cleanliness, spitting, smoking and chewing tobacco, infectious or loathsome diseases, protection of food in vehicles, protection from flies and dusts, protection from dogs, handling of food, sleeping rooms and animals, wiping fruit, limited use of appliances, drinking vessels and table-ware, and colouring of waste beer. Amendments were made to the Poison Regulations concerning the labelling of D.D.T. and the prescribing of penicillin.

Venereal Diseases Act, 1947.—A Bill to provide for the treatment of venereal diseases and to repeal the Venereal Diseases Act, 1920-1935, was placed before Parliament. The Bill was based on the National Security (Venereal Disease and Contraceptives) Regulations. The original Bill was considerably amended, but ultimately passed through Parliament.

The Act provides for the examination of suspects and if necessary, the detention of sufferers, following on an order by a magistrate. There are also sections relating to “knowingly infecting with venereal disease,” and to treatment by medical practitioners only. The Act contains provisions for protecting the patient’s rights within the limits of the requirements.

Noxious Trades Act and Regulations.—During the year the board considered representations made by various firms and local boards of health with regard to the proposed noxious trades area and the general regulations under the Noxious Trades Act.

Consequent upon such representations the board made amendments to the prescribed boundaries of the area and to the general regulations. The representations made were also submitted to the Minister of Health, as required by the Noxious Trades Act. Later, it was found necessary to review the legal position of certain requirements of the Act, in view of shortages of building materials and labour.

Fluoroscopic Units for Shoe Fitting.—Arising out of recommendations of the Committee on Industrial Hygiene appointed by the National Health and Medical Research Council, an investigation has been made into the use of X-ray units for shoe fitting at various shops in Adelaide. In general, the operation of such units is not without risks, and supervision by health authorities is warranted.

The investigations were conducted by Mr. Boyce Worthley, Physicist of the Radiotherapy Department of the Royal Adelaide Hospital, on behalf of the Central Board of Health.

The tests reveal that the units were satisfactory and that protection was adequate for both the customer and for the operating staff. Further tests of the units will be made from time to time.

Wide Range of Health Work.—The great Disraeli once said, “The great question, the great social question, which should engage the attention of statesmen, is the health of the people. That is the question which really almost comprises every object we wish for. It refers to all subjects, which, if properly treated, may advance the happiness and comfort of men.”

The various sections of this report amply show that the avenues of public health endeavour are ever-widening. The “drains and stinks” era, so limited in scope, has now given place to the day when almost everything affecting the public welfare is found to have its health aspect. It is therefore not surprising that the range and extent of the health department’s work grows and grows.

2. VITAL STATISTICS.

Mr. A. W. Bowden, Government Statist, has kindly supplied the information set out below. Figures for 1946 appear in parentheses.

Population.—For 1947 the estimated population was 646,000 (636,460).

Births.—There were 16,317 new babies (15,813). The number of births registered had fallen irregularly from 12,904 in 1914 to 11,492 in 1927, from which year there was an almost continuous fall to 8,270 in 1935, but from 1935 there has been an increase each year. The total for 1947 shows an increase of 504 on 1946 and of 8,047 on 1935.

The record number of births registered in earlier years was 12,904 in 1914, and this has now been exceeded by 3,413. But it must be remembered that the population in 1914 was only 445,000 compared with 646,000 for 1947. The 1914 births were equal to 28·97 per 1,000 of the population and it would have required 18,700 births for 1947 to represent a similar rate. The rate had fallen to 14·14 per 1,000 of the population in 1935, increasing to 24·85 in 1946 and 25·25 in 1947. The 1947 rate is the highest since 1917.

When it is noted that there were 59,287 births during the five years 1920-24, 43,061 during 1932-36 and 72,619 during 1943-47, it will be realized that problems will arise in future in such circumstances as numbers of children attending school and numbers leaving to commence employment.

Adoptions.—The number of adoptions has increased rapidly. Ten years ago the number was around 100, increasing to 355 in 1944, 317 in 1945, 455 in 1946, and 403 in 1947.

Deaths.—There were 6,215 deaths (6,461). Commencing from 1921 there had been a general, though irregular, fall in the death rate until 1933 when the rate of 8·44. was the lowest on record. From that year there had been an irregular rise to the rate of 10·99 in 1942 since when the rates have been 10·53, 9·62, 9·62, 10·15 and 9·62.

Infantile Mortality.—Here is recorded further striking progress. The infantile death rate represents the number of deaths of children under one year per 1,000 births. During the last 70 years there has been a remarkable drop in the infantile death rate—from a rate of 150 per 1,000 births in the period 1870-1880 to a rate of less than 30 in recent years.

Usually New Zealand has the world’s lowest infantile death rate with South Australia often second and once lowest. In 1946, New Zealand was the lowest with 26·10 and South Australia next with 27·07. The South Australian rate for 1947 was 24·27 ; the New Zealand rate was 24·98. The State rate has been halved during the last 20 years.

Still Births.—These are not included in either Births or Deaths, and number 387 (416).

Summary Return.—The following return shows the number of births, deaths and marriages, and the rate per 1,000 of mean population and the number of infantile deaths and the rate per 1,000 births.

Period.	Births.		Marriages.		Deaths.			
					Total.		Infants.	
	No.	Rate. (a)	No.	Rate. (a)	No.	Rate. (a)	No.	Rate. (b)
Mean.								
1920-24	11,857	23·43	4,326	8·55	4,901	9·68	693	58·45
1925-29	11,301	20·16	4,225	7·54	5,034	8·98	526	46·54
1930-34	8,989	15·54	3,660	6·33	5,001	8·65	342	38·05
1935-39	9,039	15·32	5,305	8·99	5,430	9·20	297	32·85
1940-44	11,743	19·16	6,843	11·17	6,235	10·17	406	34·57
1945-47	15,388	24·15	6,230	9·78	6,242	9·80	406	26·38
Year.								
1943.....	13,145	21·36	6,263	10·18	6,482	10·53	482	36·67
1944.....	13,311	21·40	6,019	9·68	5,984	9·62	387	29·07
1945.....	14,033	22·31	5,321	8·46	6,049	9·62	394	28·08
1946.....	15,813	24·85	6,700	10·53	6,461	10·15	428	27·07
1947.....	16,317	25·25	6,668	10·32	6,215	9·62	396	24·27

(a) Per 1,000 of Mean Population. (b) Per 1,000 Births.

3. STATE X-RAY HEALTH SURVEY.

Progress in X-ray Methods.—During the war years, plans for developing and improving the State’s health services were investigated by officers of the Central Board staff. The Advisory Committee on Health and Medical Services also considered the wider aspects of the State’s medical services. The increasing use of X-ray methods for the detection of tuberculosis in its early stages is a world-wide feature, and it received special attention. In our report for 1946, reference was made to inquiries prosecuted by the Advisory Committee.

It was the practice to make X-ray examinations of all recruits for the services during the war years. The value of the work has been amply proved.

Miniature radiography—the taking of small X-ray pictures of chests— was first made available to the public in South Australia by the Adelaide Local Board of Health in 1941. Since then more than 100,000 people have had their chests X-rayed, and some of these were notified that they had something abnormal in their chests that they did not suspect. In that way early treatment has doubtless checked the advance of illness, and saved many lives. The Adelaide Local Board is to be congratulated on its splendid pioneer work.

The success of the work, in the services and in Adelaide and elsewhere, is an assurance that the procedure is sound and valuable.

It is agreed that people in country areas should have the benefit made available to them. But the X-ray apparatus is very costly, and it would be uneconomic and unnecessary to set up permanent installations throughout the country areas, even in the larger towns.

A portable X-ray unit, mainly of Australian manufacture and of the most up-to-date design, has been bought by the Government. This will make miniature radiography available to people living in country areas. The apparatus will be moved from one country centre to another, gradually covering practically the whole of the State.

The unit purchased is considered the best on the market for the work. It takes 35 mm. pictures, the size adopted by the British Ministry of Health for mass radiography of civilians.

Plan of Campaign.—With the co-operation of the local boards of health, the X-ray apparatus with its staff will be set up in one of the public buildings in a convenient country centre. Those who wish to be X-rayed will fill in an application form. Each person will then stand in front of an X-ray screen and a camera will take a small picture of the image produced on the screen by the X-rays after they have passed through the chest. These films will be sent to Adelaide for development at the central processing depot set up at the premises of the Central Board of Health. The reading of the films will be done by a team of expert radiologists. Within a few days the application form will be returned with the results of the examination to each person who was X-rayed.

The work will be carried out by the staff of the Central Board of Health. Dr. J. Stanley Verco, Honorary Radiologist at the Royal Adelaide Hospital, has been appointed part-time expert adviser. He will advise on the technical aspects of the unit and its operation. The unit will be operated by a radiographer (X-ray technician), assisted by a trained nurse and a clerk.

Before the arrival of the unit in an area, the local board will undertake a vigorous publicity campaign by the use of notices in the local papers, notices on the local picture screens and talks to local organizations. It will be generally suitable for the local board to organize a local committee, including prominent townspeople, medical men and others. The distribution of leaflets and application forms will be arranged by the local bodies assisted by Red Cross, Girl Guides, Boy Scouts, school teachers, V.A.D.s., local clubs, bureaux and churches.

Further Medical Investigations.—The taking of chest pictures by miniature X-ray is a sort of first sieve in detecting tuberculosis in its early stages. In adults, tuberculosis generally shows itself first in the lungs, and the area of lung tissue involved casts a shadow on the X-ray film.

If a suspicious shadow is seen on a small film, a full-size film is taken. In that way the condition can be more satisfactorily studied. Further, the person will be advised to consult his doctor, so that a general medical examination and other tests can be made, and suitable treatment applied. The result of the examination in every case is kept strictly confidential.

The value of periodic health examinations is well recognized, especially for young adults and for the middle-aged. Tuberculosis and many other conditions—cancer and diseases of the heart and the kidneys, for example—are often insidious in their onset. The victim may feel little disturbance in health in the early stages, but—even at that time—

a doctor may detect abnormal features in his examination. The hope in all such cases is that early examination will enable the process of disease to be “ spotted,” and that prompt treatment will mitigate the ill effects.

Thus the miniature X-ray film may be the first step in saving a person threatened with disaster from tuberculosis : *early discovery—early treatment—early recovery.*

4. LOCAL BOARDS.

The Officer of Health.—Each local board employs an Officer of Health on a part-time basis. He is, in most cases, a doctor practising in the area, and so is in close touch with the health conditions of the local community. The Central Board is anxious that local boards should make full use of the help the officer of health is able to give. He is, in effect, the expert adviser on health problems. It is desirable for him to be kept conversant with the activities of his board. He should be consulted on any major developments. He should send a regular and detailed report to his board. It is a distinct advantage if he attends board meetings, at least three or four times a year, to discuss relevant matters and to guide the board in its programme.

The issue of *Health Notes* for April, 1947, explained the work of the officer of health, and indicated some of the special difficulties and problems. Local boards and officers are advised to study the articles carefully. Good co-operation of local boards and the officer of health is essential to the success of our administrative scheme.

Health Inspectors.—The desirable academic qualification for a health inspector is the Certificate of the Royal Sanitary Institute. Examinations are held annually in Adelaide, under the direction of the South Australian Board of Examiners. Dr. E. Angas Johnson is chairman of the board, and the secretary is Mr. Garnet Carne, M.R. San. I., Town Hall, Adelaide.

Outside the metropolitan area, very few qualified inspectors have been appointed by local boards of health under the provisions of the Health Act and Food and Drugs Act. The Central Board has from time to time urged groups of local boards to appoint a qualified inspector to act in their districts. Local Boards in the Upper Murray river districts have recently appointed a qualified inspector to supervise health work in the group of areas. This arrangement will be watched with interest.

Public health work today is not a job for amateurs. For the medical officers it is a specialized branch, and it calls for training just as exacting as that for any other specialty. The special work of the health inspector, also, is not likely to be well done by untrained men. There are courses of study for the health inspector's certificate, and there is great scope for qualified inspectors on the local boards' staffs.

Local Boards Criticized.—Several witnesses before the Special Committee of Inquiry into the State's Health and Medical Services were rather scathing in their criticism of the work of local boards of health.

Most people agree that the scheme of local government so well developed in Britain and the United States is a very wholesome thing. Professor G. V. Portus, of the University of Adelaide, has drawn attention to the backwardness of local government in Australia compared with its advanced development in Britain and the United States. He has further emphasized the desirability of extending the spheres of local government. “ But it will not be easy,” he said, “ for the conditions of our material background are not likely to change very quickly. Only a resolute determination on the part of our country groups to undertake the burdens of local administration will make decentralization possible. You can't get local self-government merely by saying how admirable it would be if only you had it.”

Responsibility must be Accepted.—South Australia's first Health Act was passed in 1873. There have been lots of amendments, but the administrative arrangements originally laid down are still much the same. The Central Board was set up as the guiding and supervisory body. The local council for every town or district was made the local board of health for its area.

Most people who study the subject will agree that there is nothing really wrong with the administrative scheme. Indeed, high hopes have been from time to time expressed on its great possibilities. Thus Mr. McEwin, our Minister of Health, has said :—

“ In this State the health of the community is largely under the jurisdiction of the local authorities. Each local board of health is responsible for its respective area. Only by each board accepting its full responsibility and going out after its problems, seeking to overcome them before they assume any real significance, can the State as a whole do its part.”

Too Many Local Boards.—There are in this State 143 local boards at the present time. That large number is one of our problems in health administration. The population in most local board areas is too small to warrant the maintenance of a satisfactory health department or centre as a distinct unit. The financial resources of most areas are too limited for that, in any case. The experience of most countries is that, for a public health centre to work efficiently and economically, it is necessary to have a population in the area of at least 75,000. On that basis this State would be provided with about eight health centres.

What is the present situation ? We have 143 local boards, each with its health work to do. The service might be more efficient if numbers of adjacent local boards were to combine their activities. Provision exists in our legislation for such arrangements, and such bodies as the Metropolitan County Board and the East Torrens County Board are examples of the fusion of local boards for purposes of health administration. Local boards in adjacent areas, especially where the general interests are similar, should consider taking action to collaborate in their public health activities.

Value of Amalgamations.—In its conclusions, the Health Inquiry Committee had this to say :—

The conduct of the detailed health work by local boards of health in South Australia has not been altogether effective. Some local boards, especially those with a fairly concentrated and large population, are doing good work. Many local boards, in whose areas the population is small and whose functions are also small, work under some difficulty. The amalgamation of groups of local boards would seem to be a satisfactory solution. Although provision exists in the Health Act for the fusion of local boards into county boards, little advantage has been taken of this provision.

It is essential that all local boards of health, or groups of local boards, should have available the services of a qualified health inspector, but there is no legal power to compel a board to appoint such a qualified inspector, nor is there any power to compel local boards to amalgamate for that purpose.

In view of the lack of qualified inspectors available for appointment and the inability of small local boards to meet the expense involved, the power to compel amalgamation of local boards for this purpose is desirable.

The Health Inquiry Committee arrived at the same conclusion that many others reviewing the matter have arrived at : the desirable aim is not to *abolish* local boards of health, but to *assist* them in some way to achieve their functions better.

5. SANITATION.

Sewage Disposal in the Country.—Installation of modern sewage treatment plants at Glenelg and Port Adelaide has provided the ideal means for disposal of a fair proportion of sewage from the metropolitan area. The Sewage Farm at Islington still deals with a large part of the sewage. The farm method of disposal does not conform to the modern idea of what is best ; and the policy of the Government is to construct a modern treatment plant to replace the obsolete method. This will enable practically all sewage from the metropolitan area to be dealt with in a safe and inoffensive manner.

In country areas the disposal of sewage is a matter for continued care. Where an adequate water supply is available, and where sufficient land is available for disposal of effluent, the septic tank provides the best disposal method. Throughout the State over 21,000 tanks have been installed, and generally the experience of their working has been eminently satisfactory. In some localities the disposal of effluent from tanks may present a little difficulty, but this can usually be overcome. Trouble also arises at times from the overtaking of the tanks, owing to the installation of a tank too small to deal with the amount of sewage regularly passed into it. It is wise that, where a new tank is being installed, the question of size should be seriously considered, and a tank sufficiently large to deal with the likely maximum daily load should be decided on.

From time to time, articles have been published in *Health Notes*, explaining the bacteriolytic tank and its working. In the issue for October, 1947, a description was given of a “ septic closet ” designed by the Victorian Department of Health. For its working only a small quantity of water is required. The tank is especially useful in small towns and country districts lacking adequate water, or where the available area of soil is unsuitable for absorbing the effluent from the usual type of septic tank.

The Central Board is producing a booklet setting out the sewage disposal methods applicable to country areas. The principles of the biological treatment of sewage, the basis of modern treatment plants, are also explained. Copies of the booklet will be available for general distribution, through the offices of country local boards.

Increasing Use of D.D.T.—In *Health Notes* for October, 1945, some methods for using D.D.T. were explained. Experiments with this wonder-insecticide are going on all over the world. As a residual insecticide, single treatments with D.D.T. have given excellent control of house flies for several months. In the issue of October, 1947, further methods were explained for the use of D.D.T. in dairies, in homes and restaurants, and for rubbish dumps.

The mass use of D.D.T.—the regular spraying of groups of premises—is worth using in fly-troubled districts. The solution advised is D.D.T. five per cent in kerosene, finely sprayed till the surfaces are just wet. The long-lasting effect of such a D.D.T. deposit is remarkable—it may be up to nine months. Any insects coming into contact with even a tiny amount of D.D.T. are doomed.

Some local boards have used D.D.T. widely and with good effect. Early last summer officers of Cleve local board sprayed all outhouses and privies in the township. Residents have also been encouraged to spray the rooms, especially kitchens and dining rooms. The results have been good : less flies and less health risks.

D.D.T. has been used in various ways in the control of insects in South Australia. However, such community efforts as Cleve used to control flies or mosquitoes have not been generally adopted. Approval has been obtained by the Central Board of Health to make detailed tests of the wide use of D.D.T. in a small country town in South Australia. Leigh Creek has been suggested as a suitable town for such an experiment. Preliminary experiments have been carried out to discover the best solution of D.D.T. to use and the amount necessary to cover the strategic areas in different types of buildings.

Rat Control.—Many areas in the State have little bother from rats, but in some places they are troublesome. Concerted and vigorous action on the part of local boards and of householders is necessary if rats are to be kept under control.

The Central Board of Health was advised of the following resolution of the Local Government Association : “ That in view of the prevalence of rats, which appear to have increased recently, concerted action be taken to rid the State of the rats because of the danger to health and the damage they cause.”

The Central Board decided, at a meeting in July, 1947, to obtain a “ rat census ” from local boards. In a circular to local boards, it was pointed out that rats are very undesirable pests. They can spread disease to human beings. To rid a place of rats the main procedures advised were to—

- (1) Trap or otherwise destroy as many rats as possible ;
- (2) Allow no collections of rubbish to lie about, especially in back yards ;
- (3) Have only properly constructed fowl yards, fowl houses, and aviaries ;
- (4) Keep garbage in sound tins with properly fitting lids ; have it removed frequently, and properly disposed of ;
- (5) Keep *all* premises in a clean, tidy, sanitary condition.

Port Pirie “ Clean-up ” Campaign.—Dr. G. Viner Smith, Officer of Health for Port Pirie, made trenchant criticism of unsatisfactory housing conditions in the town. Among his suggestions were that an additional inspector be obtained to assist with the work involved, that no further building permits be granted for houses in swamp areas, and that in

the case of the houses to be condemned the board should endeavour to obtain priority for South Australian Housing Trust or other accommodation for occupants before taking action.

"I have given a deal of thought to the question of housing in Pirie, and as there can be no alleviation without relevant recommendations, I have drawn up a list of matters which I deem necessary. It is essential that there should be a house-to-house inspection and that the names of owners be obtained," said Dr. Viner Smith. "If that is done we shall know the exact position of housing generally. So far as sub-standard dwellings are concerned we know the position is bad, but not the exact degree of defectiveness."

In a list of recommendations Dr. Viner Smith has advised that full reports about defective houses should include particulars in relation to such matters as construction, walls, flooring, roof, ventilation, lighting, dampness, state of fences, bathing and laundry facilities, drainage of surrounding ground, state of cleanliness of house and yard, name of owner and whether such person is resident on the property or if the house is rented, and any other matters deemed relevant.

Mosquitoes in the Coastal Areas.—During the year complaints were received regarding the prevalence of mosquitoes in the coastal parts of Port Adelaide, Woodville, Henley and Grange. A preliminary survey was done of these areas and the mosquito involved was found to be *Aedes (Ochlerotatus) Camptorhynchus* (Thomson). It breeds in the brackish water pools formed in tidal areas and along the edges of tidal streams, where it is protected from other larvae-eating aquatic life by the thick vegetation. This mosquito is found in all the southern coastal regions of Australia.

A conference of representatives from the various local boards concerned was held at the Central Board office. It was decided that Central Board officers, with the assistance of Mr. D. C. Swan, the entomologist at the Waite Institute, should carry out a complete survey. The local boards will be kept informed of the best methods of controlling the pest.

Purity of Air in Theatres.—Standards for the structure and other features of all places of public entertainment are laid down in the Places of Public Entertainment Act and Regulations. At the request of the Adelaide Local Board of Health, and in conjunction with its officers, an investigation of the air in ten Adelaide theatres was carried out.

Bacteriological examination of the air was done by the Adelaide Local Board of Health. Chemical examination of the air for carbon dioxide content was carried out by the Department of Chemistry. The dry and wet bulb temperature was recorded at the time of each examination. The humidity of the air, the fresh air supply per person per minute, and the normal effective temperatures, were then calculated.

No serious lack of ventilation was disclosed by the investigation. However, in a number of theatres, the amount of ventilation was found to be rather close to the minimum requirements for good health and comfort.

6. FOOD AND DRUGS.

Advisory Committee under the Food and Drugs Act.—The constitution of the committee is: Dr. A. R. Southwood (Chairman), Dr. H. K. Fry, Professor M. L. Mitchell, Messrs. R. E. A. Dixon, E. F. Lipsham, F. M. Standish and S. D. Shield. The Acting Secretary is Mr. H. T. Hutchins.

Mr. C. E. Chapman ceased to be a member of the committee at the end of 1946, when he retired from the post of Government Analyst. The committee recorded its appreciation of the good work of Mr. Chapman during his ten year's membership.

Mr. S. D. Shield became a member of the committee on his appointment as Government Analyst in succession to Mr. Chapman.

Mr. H. T. Hutchins took up the secretarial duties on the retirement of Mr. Stenning.

The committee met on two occasions in 1947, and dealt with a large number of items, mainly of a minor nature. Many suggested amendments to regulations were forwarded to the Minister.

Dangerous Drugs.—The administration of the Dangerous Drugs Act, 1934, and Regulations has proceeded satisfactorily. The board has fixed quotas of drugs to be prescribed for several new patients and continued the system with cases of long standing.

Legal proceedings were taken during the year against two pharmaceutical chemists for failure to keep records of dangerous drugs transactions and against a medical practitioner for prescribing a dangerous drug for the treatment of addiction without first obtaining the consent of the board.

Staphylococcal Food Poisoning.—On 11th November, 1947, 42 persons at the Leigh Creek coalfields became acutely ill after eating their evening meal. All recovered in a day or two. There were approximately 120 persons who had the same meal, which consisted of cold pressed ox tongue, cold roast beef, vegetables, and prunes and custard. Investigations indicated that contamination of the pressed ox tongue was the probable cause of the illness. One of the catering staff had a mild conjunctivitis and a number of impetiginous sores. The bacteriological tests indicated that the outbreak was caused by a staphylococcal infection transmitted through the pressed ox tongue by the infected food handler.

Clinically, the history, signs and symptoms resembled those caused by the contamination of food with staphylococci and staphylococcal toxins. The presence of lesions resembling those caused by staphylococci on one of those who had handled the food was further evidence in favour of a staphylococcal food contamination. Staphylococci isolated from the skin lesions, from the food and from the vomitus were all found susceptible to a fairly selective staphylococcal bacteriophage, giving further evidence indicative of contamination of the food with staphylococci by the member of the catering staff, who had the skin lesions at the time of the outbreak.

Wrapping of Food.—Shortages of various supplies during the wartime required modification of the administration of some regulations. For instance, paper was considerably restricted. In view of the shortage, the Central Board felt it impracticable to enforce the strict observance of the Food and Drugs Regulations regarding the use of only new clean white or brown paper as a wrapping for meat, fish, or bread.

By circular on 22nd May, 1940, the Central Board of Health recommended that local authorities under the Food and Drugs Act should not, until further advised, take action against persons for not wrapping bread in new clean white or brown paper, provided that only clean newspaper was used instead.

A further circular on 16th December, 1940, recommended that local authorities under the Food and Drugs Act should not, until further advised, take action against persons for using clean newspaper as an outer wrapping for meat or fish, provided that meat or fish was first completely covered with either clean white or brown paper.

In January, 1947, the Central Board of Health reviewed the matter, finding that ample supplies of new clean white and brown paper were then available. The board therefore decided to advise that local authorities enforce the regulation requiring that “ no paper other than new clean white or brown paper shall be used as a wrapping for meat, fish, or bread.”

“ *Food* ” *Issue of Health Notes*.—Many people and official bodies have expressed appreciation of the special issue of *Health Notes* at Christmas, 1947. The Minister contributed a vigorous introduction to the series of articles on aspects of food and nutrition.

In recent years there have been great advances in knowledge about foods, their constitution and relative value. The Christmas bulletin set out much of the new knowledge in a simple non-technical form.

To meet many requests for additional supplies of the “ *Food* ” bulletin, the printing order was greatly increased. A small supply is still available at the Central Board office.

7. INFECTIOUS DISEASES.

Statistics.—Cases and deaths from infectious diseases during 1947, compared with figures for 1945 and 1946, are shown hereunder :—

Disease.	Cases.			Deaths.		
	1945.	1946.	1947.	1945.	1946.	1947.
Anthrax	—	—	1	—	—	1
Cerebro-spinal meningitis	23	14	17	—	—	4
Diphtheria	210	161	93	14	9	4
Dysentery, amoebic	3	28	2	1	2	1
Dysentery, Bacillary	27	14	14	1	1	4
Encephalitis Lethargica	1	3	—	—	1	—
Endemic Typhus fever	5	6	3	—	—	—
Erysipelas.....	65	67	68	—	—	1
Influenza	1	—	9	—	5	5
Measles	740	8,986	724	3	15	2
Paratyphoid fever	1	—	—	—	—	—
Polioomyelitis, anterior acuta	9	66	55	—	4	3
Psittacosis	2	—	—	1	—	—
Puerperal pyrexia	27	36	36	—	—	—
Scarlet fever	788	547	428	1	—	1
Tuberculosis, Pulmonary	226	233	202	173	168	169
Tuberculosis, other forms	22	8	14	28	15	23
Typhoid fever	9	4	2	2	—	1
Undulant fever	2	—	1	—	—	—
Whooping cough	1,883	264	17	9	3	—

Death from Anthrax.—A death from anthrax was recorded in September, 1947. The victim, a carpenter living at Unley, was admitted to the Royal Adelaide Hospital with an inflammatory lesion on the neck. He died shortly after admission to hospital, and the bacteriological examination established anthrax as the cause of death. Anthrax is rare in this State. The last case occurred at Port Adelaide in 1938, and the previous one at Port Pirie in 1931. The source of infection in the recent case was not found.

Cerebro-Spinal Meningitis.—With the use of sulphonamide drugs, recovery from cerebro-spinal meningitis occurs almost ten times as frequently as was the rule years ago. The occurrence of four deaths in 17 cases in 1947 calls for comment. The victims were all babies, and the illness was fulminating in type. The localities were scattered : Adelaide, Kent Town, Whyalla and Laura. No infection-linkages were found.

Diphtheria Figures Improve.—A steady decline in cases and deaths has occurred in the last few years. Last year has shown the lowest figures for diphtheria in this State since 1930. Continued immunization work will give still better results.

Compare the death-rates—the number of deaths in every 100,000 of our population. In the ten-year period 1911-1920 the average annual rate was 18·2. In the period 1938-1947 the average yearly figure was 3·6. In 1947 there were 93 cases, four deaths, and a death-rate of less than one. Here are some details :—

	Cases.	Deaths.	Death-rates.
1940.....	603	20	3·33
1941.....	1,168	40	6·64
1942.....	630	40	6·55
1943.....	723	25	4·06
1944.....	395	18	2·90
1945.....	210	14	2·25
1946.....	161	9	1·41
1947.....	93	4	0·62

During March and April the Central Board conducted a State-wide publicity campaign. Local boards were urged to make anti-diphtheria work a major activity. Regular round-the-year sessions for immunization were generally recommended, but the holding of special “ drives ” was also advisable.

Poliomyelitis.—In 1947 there were fewer cases of poliomyelitis than in 1946, but the cases—occurring towards the end of the year—were part of an outbreak continuing into the early months of 1948. In the previous epidemic, in 1937-38, there were 341 cases with 21 deaths.

During the past 12 years the notifications received by the Central Board of Health have been :—

	Cases.	Deaths.
1936.....	5	—
1937.....	85	2
1938.....	284	20
1939.....	4	3
1940.....	63	1
1941.....	1	3
1942.....	3	2
1943.....	2	1
1944.....	2	—
1945.....	9	—
1946.....	66	4
1947.....	55	3

Cases of infantile paralysis (poliomyelitis) occur from time to time in most communities. Occasionally the illness becomes an epidemic, as it did in Australia in 1937. Epidemics are notoriously variable in their nature. In 1946, it appeared that an epidemic of poliomyelitis was developing ; there was an increase in the number of cases, but the trouble did not assume the proportions usually labelled “ epidemic.”

A disquieting feature of the 1947 outbreak was the occurrence of very acute illnesses resembling poliomyelitis, but affecting the brain rather than the spinal cord. In the big epidemic of 1937-38 in South Australia, several such cases of brain inflammation (encephalitis) occurred, accompanied by paralysis of the nerve centres controlling the breathing and the circulation. Such cases constitute the bulbar form of poliomyelitis, although they are sometimes given the compound name of polio-encephalitis. They are probably due to the same virus that causes poliomyelitis, or to some similar virus.

The Central Board, in a circular issued to medical practitioners in December, indicated the clinical features of the cases occurring, and especially drew attention to the bulbar types. An extract :—

The features of these acute cases have been those of a febrile illness, with paresis of the muscles of the pharynx. Difficulty in swallowing and a nasal voice are noted. There may be a rapid development of respiratory failure. From the public health point of view it is wise to regard such cases as severe types of poliomyelitis, and to have them reported to the local boards as such. Already some deaths have occurred, but formal notification of these has not yet reached the Central board office, and the statistical statement above does not include them.

Practitioners were requested to indicate, in reporting poliomyelitis cases, when the bulbar form occurred.

At a special meeting of the Advisory Committee on Health and Medical Services, reports were received from the Medical Superintendents of the Adelaide Children’s Hospital and the Infectious Diseases Hospital. The Director of the institute of Medical and Veterinary Science and the Honorary Medical Secretary of the British Medical Association (S.A. Branch) also attended the meeting by invitation.

Following a general discussion, the meeting formulated the following points :—

1. The recent increase in the number of cases of poliomyelitis suggests the possibility of a continuing epidemic, but there is no definite indication that a *large scale* epidemic (as in 1937-38) is imminent.
2. The cases of polio-encephalitis reported from the Adelaide Children’s Hospital were probably due to infection by the poliomyelitis virus or some allied virus. For public health purposes the cases should be regarded as the bulbar form of poliomyelitis.
3. There is no vaccine or other specific preventive agent against poliomyelitis. Serum injections are considered ineffective, either for prophylaxis or treatment.
4. The risk of spread of infection may be reduced by observing certain general precautions, some of which are stated below.
5. Crowding of children in rooms, halls or other enclosed places is undesirable.
6. Operations for removal of tonsils and adenoids, and for extraction of teeth, should be postponed, if practicable.
7. Visitors are being excluded from the wards of the Adelaide Children’s Hospital. The opinion of this meeting confirms that action.
8. The water of a swimming bath, if properly chlorinated, is not likely to become a source of infection. Overcrowding of swimming baths is a more serious danger. Bathing in stagnant waters may be risky.
9. Holiday camps for children may constitute a risk, especially if crowded and if the sanitation is faulty.
10. General hygienic measures, such as control of flies, boiling of milk, washing of fruit, and attention to personal cleanliness are aids in restricting the spread of infection.

The Central Board received the above report at its meeting on 16th December, 1947, and authorized the distribution of copies to medical practitioners.

8. VENEREAL DISEASES.

Venereal Diseases Act, 1947.—As indicated in section 1 of this report, the new Act is now in force. In the main, it adopts into State legislation the procedures followed during the war years under the National Security (Venereal Disease and Contraceptives) Regulations introduced by the Commonwealth Government. Those regulations were found valuable in enabling sources of infection to be detected, and then ensuring that sufferers continued treatment.

Under the Act the rights of sufferers and suspected sufferers are well protected. There is little chance of ordinary well-conducted citizens being inconvenienced in any way by the administration of the new Act.

Some Administrative Features.—During 1947, 129 suspected sources of infection, which were considered reasonable to trace, were reported to the Central Board of Health. Most of the information was derived from patients under treatment at the Royal Adelaide Hospital. Sixty-eight of the suspected sources were girls who were ultimately traced, diagnosed and placed under treatment. A number were reported on more than one occasion, sometimes under different names. A number of these are probably the same persons who were previously cited and not identified.

Ten ex-servicemen, who had undergone sufficient treatment for syphilis to render them non-infectious, were reported to the Central Board of Health for purposes of “follow up.”

The chief difficulty in the control of Venereal Disease remains the same :—

1. Promiscuous males often do not trouble to inquire the names or addresses of their sex contacts. They are usually under the influence of drink at the time of intercourse.
2. There is a considerable amount of interstate travel taking place at present. Persons become infected outside South Australia. Their suspected sources of infection are reported to the appropriate health authorities when sufficient detail is obtainable.

To encourage persons who expose themselves to the possibility of infection to behave in a rational manner, a poster for display in public conveniences was devised.

State Venereal Diseases Scheme.—Local boards of health are not obliged by law to deal with venereal diseases control. The diseases are not classified in the law in this state as notifiable infectious diseases. Nevertheless, their contagious nature renders them a serious public health problem. The Government is anxious to minimize their incidence and damaging effects. With this object in view a free investigation and treatment scheme came into force at the end of 1944. The scheme has worked satisfactorily.

The booklet “Gonorrhoea and Syphilis,” issued by the Central Board of Health, explains the administrative and financial arrangements. The National Security Regulations relating to venereal diseases were revoked in December, 1946. From then till the new Act came into force, there were no legal powers available in South Australia to deal with the medical examination of persons suspected to be suffering from venereal disease. Case-finding could only be done on a voluntary basis. In spite of the difficulties which occasionally arose when dealing with recalcitrant or irresponsible disseminators of disease, some progress in case-finding was made in the metropolitan area through voluntary methods alone. The Act of 1947 gives power for examination and treatment in appropriate cases.

Printed leaflets on “Gonorrhoea” and “Syphilis” have been devised for general distribution, and the folder “Fair Go” for distribution to patients proved to be suffering from a venereal disease. The printed sheets “Live Cleanly” are considered suitable for public display or distribution. Officers of health and secretaries of local boards may obtain supplies of any of the printed matter by applying to the Central Board of Health office.

Small posters have also been issued for display in public lavatories. The Chairman and Secretary of the Licensed Victuallers’ Association of South Australia kindly co-operated in encouraging their members to display the posters in hotel premises. It is difficult to assess the value of the posters, but a number of inquiries relating to venereal disease were received at the Central Board of Health as a direct result of same. Local boards were asked to assist in having the notices displayed in public premises in their areas.

9. TUBERCULOSIS.

Development of Control Methods.—In 1932 the Central Board of Health adopted a scheme for the administrative supervision of sufferers from tuberculosis, applying at the outset only to the metropolitan area. The plan was found useful, and in April, 1939, its scope was extended to the country areas. The Infectious Diseases and Tuberculosis Regulations, 1938, set out in legal form the main provisions of administrative control.

In the metropolitan area many of the patients are under treatment at the official chest clinic at the Royal Adelaide Hospital. Almoners of the clinic staff, in the course of their duties, are able to assist in home supervision. In the country areas it is generally the case that the patient’s doctor is also the local board’s officer of health. In his visits to the home he is able to act in the joint capacity.

Tuberculosis is generally a chronic illness, and the supervision necessary is somewhat different in type from that required in connection with outbreaks of acute infectious illness. The supervision of the patient’s home may have to continue over many years. The inspector must be very tactful and understanding, lest the patient and his relatives resent the visits. To minimize difficulties, the Central Board modified the rule regarding home visiting; in October, 1944, the following instruction was issued :—

As a general rule, when a case of tuberculosis is reported, the local board of health arranges for its nurse-inspector or health inspector to visit the home to investigate the public health aspects of the illness. If the practitioner wishes that the official visit and inquiry should not be made, he must give his reasons on the back of the report form, and must himself undertake to supervise all necessary preventative measures.

There is obviously need for extreme care and tact in the conduct of home supervision. Further, the great value of co-operation of the local board’s officers with the patient’s medical attendant is to be stressed. The Central Board further recognizes that the regular monthly visiting by officers of local boards is not always essential. Where the home conditions are quite satisfactory, quarterly visits may be enough. A good understanding with the patient’s medical attendant may obviate much of the board’s inspecting work. In any case, however, the initial visit must be done by an officer of the local board. A thorough inspection is to be made of the premises and of the means for preventing spread of infection, and the information for the Inquiry Card obtained.

Non-co-operative Tuberculosis Patients.—From time to time considerable difficulties are caused by a few tuberculous persons who will not co-operate in procedures designed to limit the spread of infection. There are also instances where persons, who are strongly suspected to be suffering from tuberculosis, decline to be examined and to take precautions against spread of infection.

When such persons set out to defy the advice and instructions of the health authorities, it is found that the existing legislation is inadequate to bring them under control. Steps are being taken to formulate more effective legislation.

Mass Surveys.—The State Government has purchased its first X-ray unit for mass surveys. It is likely that the State-wide health surveys will greatly assist in tuberculosis control. *Early discovery—early treatment—early recovery* is the slogan. General information on the survey was published in *Health Notes* for October, 1947, under the heading “X-rays in Thousands.”

Three new leaflets were issued by the Central Board. *X-ray Health Survey* briefly explains the object and method of the new scheme; *On Your Guard* tells of the nature of tuberculosis and its risks; *The Patient* explains what can be done to check the spread of infection. Copies of the leaflets are available to all local boards.

Tuberculosis in Children.—An article on this subject by Dr. E. B. Sims, Medical Superintendent at the Adelaide Children's Hospital, appeared in *Health Notes* for January, 1947.

Pulmonary tuberculosis in children constitutes a rather different problem from the same disease in adults. Children are very susceptible to the tubercle bacillus and when they are exposed to a tuberculous environment, especially in the intimate contacts of the home, they almost inevitably contract the disease. This infection in the child (or in any person coming into contact with the tubercle bacillus for the first time) is called *primary tuberculosis*.

Primary tuberculosis may be completely symptomless. It may be detected in a plump, rosy and apparently well child only by a routine Mantoux skin test and chest X-ray; or it may start comparatively abruptly with acute respiratory symptoms suggestive of pneumonia, and only be revealed in its true light by a positive Mantoux test and by the failure of the X-ray shadows to resolve as quickly as would those of an ordinary pneumonic process.

Dr. Sims discussed other types of tuberculous infection in children. He explained what should be done:—

The only treatment necessary in ordinary cases of childhood tuberculosis is rest in hygienic surroundings for a few months. The most important thing is to remove the child from the focus of infection. To find that source is doubly important, not only for the individual child, but especially for the infecting person who is almost certainly an adult in the child's immediate environment. If the child is under the school-going age, the odds are on the infector responsible being one or other of the child's own parents. This is the main point to stress in childhood pulmonary tuberculosis: the positive Mantoux child is not only a patient—he is a pointer to a possible undiagnosed case of tuberculosis in an adult who should be searched for by a thorough investigation of the family group.

From the other aspect, should an adult case of pulmonary tuberculosis be diagnosed and be allowed to live at home whilst undergoing treatment, all young uninfected children in the house should be sent to an appropriate home or preventorium to avoid further contact until the sufferer is pronounced non-infectious.

The Mantoux Test.—Dr. R. J. deN. Souter, Officer of Health for Yankalilla, made a very useful investigation in his area, applying the Mantoux skin test to a group of school children. He described the work in *Health Notes* for October, 1947.

The Mantoux test is one of the special tests used for deducing the fact of primary tuberculous infection in any individual. It is a fairly simple test for a doctor to do. It consists in the injection of a very weak dilution of tuberculin *into* (not under) the skin. It is a safe test, and its results are generally reliable.

Early this year, Dr. Souter arranged for the teachers to circularize the parents concerned and obtained their written permission for the test to be made. There were only a few dissentients. The needful amount of tuberculin was procured at suitable dates to do each school on a convenient day, so that the results could be read on a second school day. The staffs of the schools were included in the survey. The teachers were very helpful in co-operating and in most cases collected a fee of 2s. 6d. per household to cover the cost of material and transport. About 50 children were tested and nine adults.

Five adults gave positive reactions of varying degrees of intensity and these all forthwith had their chests X-rayed. They were all reported clear radiologically. Of the children, there were only two positive reactors. These were brothers. Their parents were interviewed and subsequently this whole family was skin-tested and X-rayed. No evidence of infection was found except in the two boys. The source of infection was probably an uncle of the boys, from contact a few years before.

The Duty of Local Boards.—The regular supervision of home conditions of tuberculous sufferers is a responsibility of local boards, and it demands serious attention. An instance of apparent neglect was disclosed to the Central Board.

Each local board is required to send to the Central Board a statement each year, showing the names and addresses of all sufferers from tuberculosis reported at any time and still residing in the district at each year-end.

A study of the returns in 1947 showed some apparent anomalies. In one area the numbers looked excessive in proportion to the population. There were 166 names on the list. Even when information in the Central Board office showed that 37 names of persons should be marked off as having *died* or *left the district*, the balance of 129 names seemed unduly high.

Subsequent investigation by the Central Board's nurse-inspector showed that only 44 of the persons listed originally were actually living in the district; 57 had either left the district or could not be located at the addresses stated; 15 had died and 13 had received clearance certificates.

Such misleading returns show at once that the local board concerned is not doing its job. If regular home-visiting had been done there should have been some approach to accuracy. Inaccurate records are worse than no records at all.

As part of the State-wide anti-tuberculosis campaign, a survey as to present methods of control carried out by local boards of health in the metropolitan area was recently undertaken.

In the supervision of cases of tuberculosis there are considerable differences in the methods pursued, even in adjoining districts. The number of official visits varies from one or more monthly to one yearly. In certain cases no visits have ever been paid.

Ratepayers are right in expecting local boards to exercise every care against spread of tuberculosis. Unless local boards keep their records of cases up-to-date, and conduct the supervision of tuberculous households along the proper lines, there will continue to be more cases of the disease in our midst. The duty of supervision and control rests with the local boards.

10. THE FUTURE OF PUBLIC HEALTH.

Health and Law.—Public health laws, in their early phases one hundred years ago, were altogether remedial in design. The plan was to detect and then to remedy the defects, and especially to clean up insanitary conditions. Progress has been made. The gross insanitary conditions of last century have gone. Bad drainage, slum housing, filthy streets—those ill features of the bad old days—have given place to clean wholesome ways of living. That there are still many defects and much back-sliding nobody will deny. But the community outlook is immeasurably better, and insanitary conditions will only be tolerated by the very poor and the very ignorant.

Control by law was the first step in effective public health advance. Restrictive health laws, such as those providing for the compulsory isolation of sufferers from infectious diseases, are founded on the principle that public health is paramount, that it is the first duty of every State to protect the public.

How far should laws go? John Stuart Mill once put it: “The sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number is self-protection. He cannot rightfully be compelled to do or forbear because it will be better for him to do so, because it will make him happier, because in the opinions of others to do so would be wise or even right. These are good reasons for remonstrating with him, or reasoning with him, but not for compelling him or visiting him with any evil in case he do otherwise.” Farrar says: “Man’s liberty ends, as it ought to end, when that liberty becomes the curse of his neighbours.”

Legal control took a big place in the development of public health. In proportion as people learned more about the way in which certain diseases were propagated, and the measures by which their spread could be prevented or controlled, statutory law gave powers to local authorities—to the people’s representatives, elected by the people themselves—to interfere more and more with individual liberty for the sake of protecting the whole community.

Health administrators have full reason to be grateful to the law. Laws of various countries have put public health work in the strong position it holds to-day.

Health and Education.—England has been the world-leader in public health advances and the evolution there of the present public health service was the steady development of a century. Its trend was directed by two much wider influences—kindlier feeling between men, and a desire for more learning. In the dark days when disease was regarded as a visitation from the gods, it was futile to think of making an effective protest—the gods knew best, and they rewarded or punished men according to deserts. Later, with increased knowledge of the causes of disease, the knowledge that diseases are often the result of our own or our neighbour’s carelessness, the knowledge that diseases are therefore often preventable, came the call and opportunity to take action, to exercise attempts at control of disease by law.

We have now come to a third era, an era where education must play a still greater part. Just as the trend in the medical care of people must be less along curative lines and more along preventive, so the advances in public health may be expected to come largely from greater education of the people generally. More attention is being paid to public instruction, and less thought given to legislation.

Of course, laws based on proved facts of preventive medicine have exercised an educative influence which, in time, has had far-reaching aspects. Not so many years ago, the floors of railway carriages and other places of public resort where smoking was indulged in were made indescribably disgusting, owing to the prevalent habit of promiscuous spitting. When the knowledge came that tuberculosis was spread by infected sputum, the law intervened, forbidding the practice, at least in public places. Nowadays, even the man in the street knows that this habit is not only offensive but that it is a menace to the people’s health. Consequently, the practice is almost extinct; the early law has served its purpose and is now hardly needed. Law and education have worked together in advancing Health.

Educationists have recognized that instruction in health comes within their province. Bertrand Russell, in “Education and the Good Life” shows to how great an extent good community health depends on good educational methods. It is no exaggeration to say that the future of the people’s health rests largely with the schoolmaster.

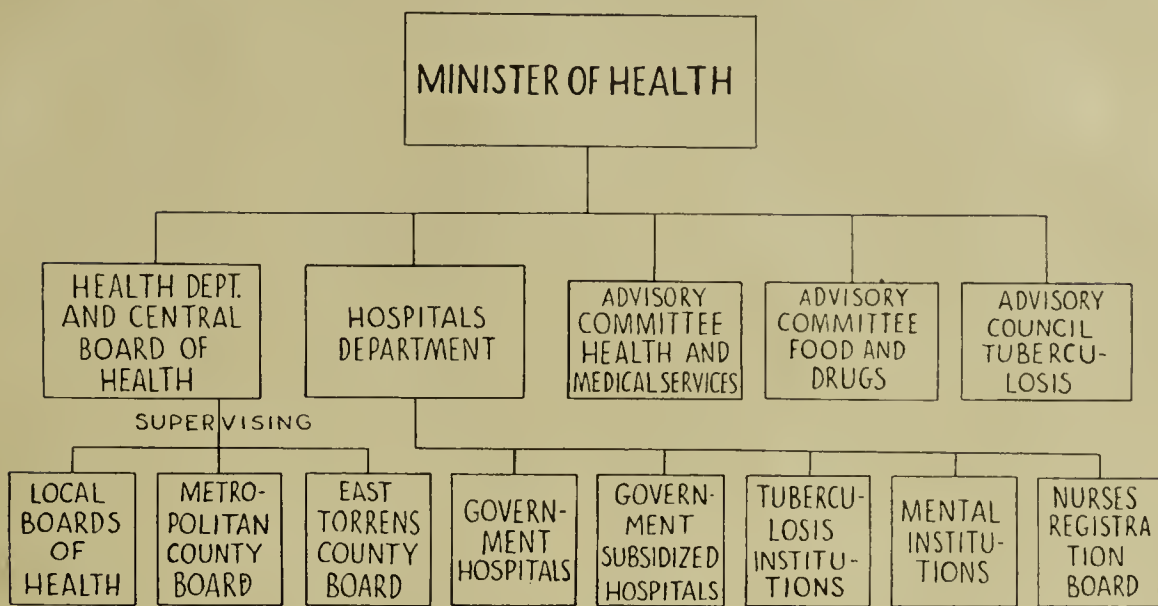
The Plan in South Australia.—The development of public health laws and services has required the establishment of departments of health. These generally are central or local in type—the central authority being directive and supervisory, the local distinctly executive. That is the British plan in administration, and it has been followed in this State.

The health administration of South Australia is under the charge of the Chief Secretary as Minister of Health. The Central Board of Health consists of three medical men (one of whom is the chairman, and permanent head of the department), appointed by the Governor, and two representatives of local boards of health.

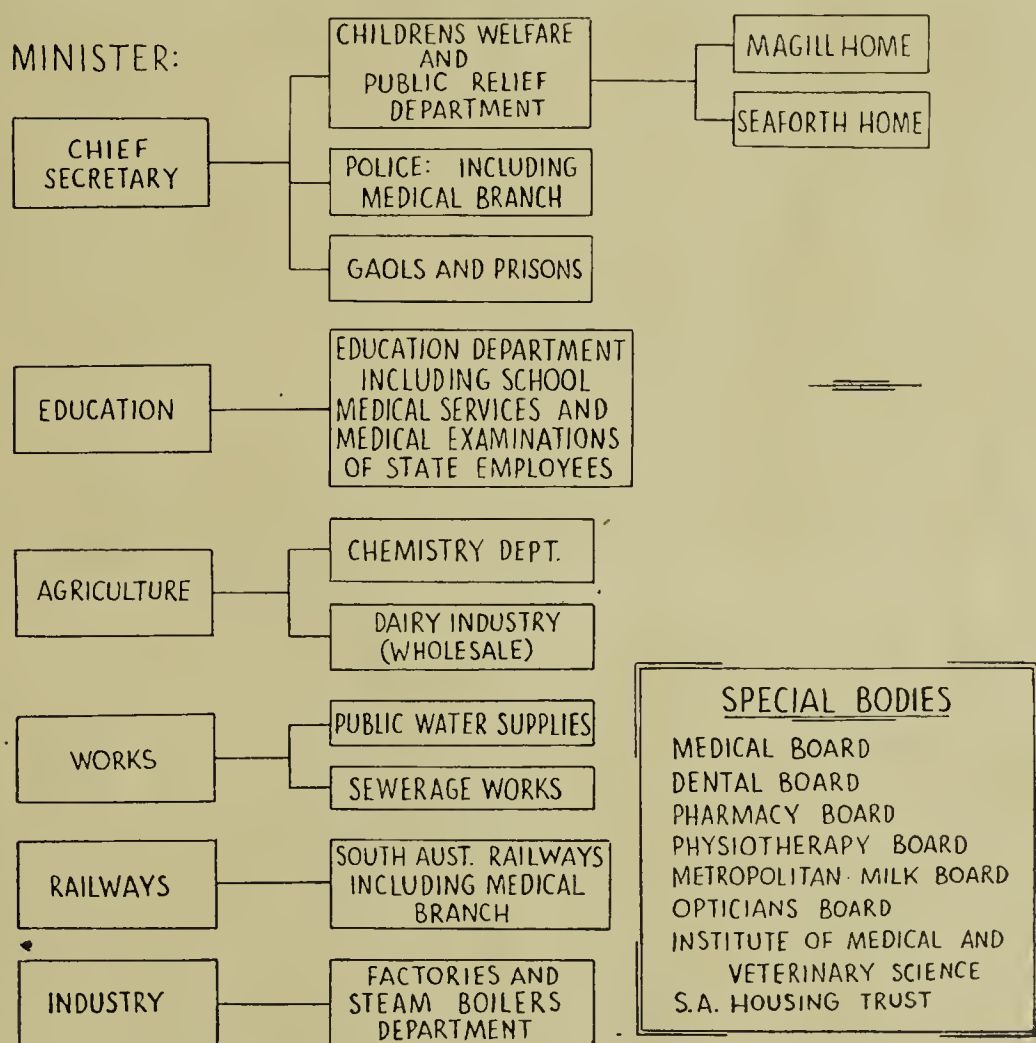
The Central Board acts as a supervisory body over all local boards, and supplements this by an active policy of inspection and advice. It also has concurrent jurisdiction with local boards. Outside the boundaries of local authorities, the Central Board alone administers.

The diagram sets out the plan now operative in South Australia.

PUBLIC HEALTH IN SOUTH AUSTRALIA



OTHER DEPARTMENTS HAVING ALLIED FUNCTIONS



Continued Progress.—Modern preventive medicine is, at basis, largely an attitude of mind. Knowledge of diseases and their causes steadily grows. The application of the knowledge depends on the understanding and enthusiasm of medical practitioners and health authorities. The general public and the legislators must also be enthusiastic, if we are to get the best results in preventing disease. Progress depends largely on the work of health departments, but for real success the co-operation of whole communities must be obtained. Take for example, diphtheria immunization. Its value and its safety have been known for over twenty years. Yet even now and in otherwise enlightened communities, we find illness and death from diphtheria still occurring.

A recent editorial in the *Medical Journal of Australia*, reviewing the progress of public health, stated :—

When we come to think of the future we should remember that the conditions of life have altered during the last few years in a remarkable way. Apart from the war with its aftermath of devastation, of poverty, of distrust and of fear, the world has become smaller—air travel and the radio have brought the most distant countries closer together, so that the nations may be said to live almost cheek by jowl. Life seems to be lived at an increased pace and with greater intensity than has been known before. This cannot fail to have an effect on the public health—and not on the public health alone, of course, but on all other aspects of life.

Suitable organization of health departments is always worth considering. Under a faulty administrative scheme, progress may be difficult, but slack unenthusiastic administrators make a bigger stumbling block. Whatever the organization, unless the officers are active workers, there can be little advance. The enthusiasm and the vigorous efforts of every member and every officer of every health authority in the State are the only assurance that our community will reap the best results of the great advances in medical knowledge.

A. R. SOUTHWOOD, Chairman.

E. ANGAS JOHNSON,

J. B. CLELAND,

A. R. BURNELL,

F. C. LLOYD,

} Members.

H. T. HUTCHINS, Acting Secretary,
Adelaide, 25th May, 1948.

